

QUARTERLY GROUNDWATER MONITORING REPORT

Fourth Quarter 2005 (Fourteenth Quarterly)
Sampled on October 27, 2005
Job # SP-23
LOP # 12660

BO&T Company Office (BO&T Old Office) 211 Railroad Avenue

Blue Lake, California 95525

January 25, 2006

This *Quarterly Groundwater Monitoring Report* was prepared by SounPacific Environmental Services (SounPacific) staff for David and Christina Fisch, using data from previous studies conducted by Clearwater Group, Inc. (CGI) and information collected from files reviewed at Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH). The BO&T Old Office site (the Site) is located at 211 Railroad Avenue, Blue Lake, California (Figure 1).

SITE DESCRIPTION

The Site is surfaced around the current structure with concrete and vegetation. Site improvements include a single story building. The main structure is positioned in the southern portion of the property with the entrance to the building facing south towards Railroad Avenue. A storage building is located adjacent to the eastern property line immediately north of the primary building (Figure 2). The Site is serviced by public utilities. Surface water is controlled by storm drains.

SITE TOPOGRAPHY AND LAND USE

SounPacific understands that the property is owned by David and Christina Fisch of Valley Springs, California. The main structure is currently used as an office for Fisch Environmental. The surrounding land use in the immediate vicinity is residential with an interspersion of commercial properties. Residential properties lie to the north, east, south, and west of the site. BO&T Old Office is located approximately 90 feet above mean sea level (amsl). The Mad River is located approximately one half mile to the south and Powers Creek is located approximately one quarter mile to the east of the Site. The City of Blue Lake is situated in the Mad River flood plain. Site topography slopes gently toward the southwest (Figure 1).

SITE HISTORY

Previous studies by Clearwater Group, Inc. (CGI) and SounPacific at the Site indicated the following historical information:

1998 UST Removal (CGI)

Beacom Construction of Fortuna, California (Beacom), performed UST decommissioning and removal work on March 6, 1998. Upon completion of tank removal activities, two soil samples

(PI-1 and PI-2) were collected from beneath each end of the pump dispenser island at a depth of three (3) feet bgs, and four soil samples (SW-1 through SW-4) were collected by CGI from the excavation sidewalls at depths between seven (7) and eight (8) feet bgs (Figure 3). In addition,

one groundwater sample (GW-1) was collected from the bottom of the excavation. Laboratory analysis reported petroleum hydrocarbons in all six soil samples, with samples SW-3 and SW-4 collected from the eastern sidewall of the excavation reporting the highest concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo); benzene, toluene, xylenes, ethylbenzene (BTXE); and methyl tertiary butyl ether (MTBE), see Table 1. The remaining samples reported low concentrations of these constituents. The groundwater sample reported extremely elevated concentrations of petroleum hydrocarbons (Table 2).

2000 Subsurface Investigation (SounPacific)

This investigation was instigated in January of 1999, when in a letter dated January 14, 1999, HCDEH requested a proposed work plan to determine the extent of contamination beneath the site and conduct a sensitive receptor survey within a 1,000 foot radius of the site. On October 24 and 25, 2000, SounPacific conducted a subsurface investigation at the Site that was performed in accordance with the July 9, 1999 approved CGI Work Plan. Ten soil borings (B-1 through B-10) were drilled and soil samples were collected at depths of five (5) foot intervals, with the exception of boring B-8, which had a sample additionally collected at eight (8) feet bgs (Figure 3). Soil analytical results indicated that the sorbed phase contamination was restricted to boring B-5, which was located just above the former UST pit (Table 1). Laboratory analysis of grab

groundwater samples collected from the boreholes indicated that groundwater was impacted throughout the site (Table 2). The majority of contamination was reported adjacent to the former USTs and dispenser areas. Boring B-8 reported an unusually high concentration of lead in the groundwater. Further investigation was deemed necessary in order to define the lateral and vertical extent of soil and groundwater contamination.

2000 Sensitive Receptor Survey (SounPacific)

In October of 2000, SounPacific staff along with Public Works personnel from the City of Blue Lake conducted a door-to-door well survey. Three domestic wells were discovered within a 1,000 foot radius of the site, and their locations were documented in SounPacific's *Report of Findings*, dated December 20, 2000. One domestic well (DW-1) positioned across E Street, to the west of the site, was sampled during the third quarter 2003 (Figure 2). No petroleum hydrocarbons were reported at or above detection limits from this well (Table 4).

2002 Subsurface Investigation (SounPacific)

In a letter dated March 1, 2001, HCDEH requested SounPacific to submit a work plan to define the extent of the contamination, install groundwater monitoring wells, and sample wells identified by the sensitive receptor survey. During May 2002, SounPacific staff performed a subsurface investigation at the Site in accordance with SounPacific approved *Subsurface Investigation Work Plan*, dated April 25, 2001, to determine the horizontal and vertical extent of the soil and groundwater contamination. The investigation consisted of drilling nine soil borings (B-11)

through B-16 and MW-1 through MW-3) (Figure 3). Soil samples were collected for laboratory analysis from the six soil borings (B-11 through B-16) at four (4) foot intervals. The soil from boreholes MW-1 through MW-3 were logged and converted to monitoring wells (MW-1 through MW-3). None of the soil samples reported elevated levels of TPHg, BTEX, or fuel oxygenates, however, boring B-12 did report TPHmo at 197 ppm at 12 feet bgs (Table 1). Groundwater contamination was detected to the north, in boreholes B-15 and B-16, and to the west, in boreholes B-11 and B-12. The most significant groundwater contamination was from borehole B-12, where TPHg was reported at 25,800 ppb (Table 2). The analytical results from the investigation indicated that delineation of the groundwater contamination was still necessary to the east, west and south of the site. The three groundwater monitoring wells were incorporated into a groundwater monitoring program.

2005 Subsurface Investigation (SounPacific)

During January 11 & 12, 2005, SounPacific conducted a subsurface investigation at the Site to further delineate the groundwater contamination to the east, west, and south of the site and determine the vertical delineation of the MTBE plume using depth discrete sampling. Soil samples were collected from two onsite soil borings (B-19 and B-20) and two off-site soil borings (B-17 and B-18) (Figure 3). With the exception of a sample collected at 12 feet bgs in boring B-20, which was located adjacent to the site of the former USTs, no soil contamination of concern was identified (Table 1). Grab groundwater samples were collected from borings B-17 through B-25 to determine the lateral extent of the groundwater plume. Laboratory analysis, identified TPHg in three of the groundwater samples, and MTBE in five of the groundwater samples. The highest level of contamination was in the groundwater from boring B-20, however, the distribution of the contamination indicated that the groundwater contaminant plume had

migrated offsite towards the southwest.

May 2002 to October 2005 Groundwater Monitoring (SounPacific)

Following the initial sampling of the monitoring wells May 2002, quarterly groundwater monitoring had been implemented for the Site's three groundwater monitoring wells in July 2002. During this time the depth to groundwater has ranged between two (2) feet and eight (8) feet bgs, with a predominant groundwater flow direction that ranged between the west and southwest, although significant variations to this have been reported that would account for the wide distribution of the contamination. All three monitoring wells have consistently reported the presence of petroleum, particularly well MW-3, which has reported the highest concentrations. All groundwater elevation and analytical monitoring data is presented in Tables 3 and 4, respectively.

RESULTS OF QUARTERLY SAMPLING

A quarterly groundwater monitoring program was implemented by SounPacific on July 15, 2002, and will continue until further notice. The program initially consisted of recording monthly water level data and the quarterly collection of groundwater samples for laboratory analysis. The monthly water level data collection was changed to quarterly after the April 2003 monitoring event. Water level data is used to develop a figure which displays the groundwater gradient and average flow direction using standard three-point calculations. Analytical results from groundwater samples collected from the monitoring wells during quarterly sampling events indicated hydrocarbon contamination levels in the groundwater beneath the site. The data in this report is for the monitoring wells gauging and sampling conducted on October 27, 2005.

FIELD DATA

Wells gauged: MW-1, 2, and 3

GW levels: GW depth ranged from 5.56 to 6.66 feet top of casing (Table 3)

Elevation ranged from 84.54 to 84.81 feet above mean sea level (Table 3)

Floating product: Sheen detected in MW-1

GW flow direction: East (Figure 4)

GW gradient: 0.006 feet per foot (ft/ft) (Figure 4)

On October 27, 2005, the depth to groundwater in the site's three monitoring wells ranged from 5.56 feet below top of casing (btoc) in well MW-3 to 6.66 feet btoc in MW-2. When corrected to mean sea level, water level elevations ranged from 84.54 feet amsl in MW-2 to 84.81 feet amsl in MW-3. Groundwater levels for the October 27, 2005 monitoring event, along with historical level and elevations are included in Table 3. Groundwater flow was towards the east at a gradient of 0.006 feet per foot. The groundwater flow and gradient are graphically depicted in Figure 4. Prior to sampling, all wells were purged; the groundwater field parameters for each well are presented below and on the following page.

MONITORING WELL MW-1 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pН	Temp./ F	Cond./ ms(cm) ⁻¹
11:50 am	0	6.79	66.70	0.415
11:56	1.4	6.85	65.81	0.404
12:00	2.8	6.88	65.13	0.428
12:04	4.3	6.83	64.90	0.419

MONITORING WELL MW-2 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pН	Temp./ F	Cond./ ms(cm) ⁻¹
12:19 pm	0	6.93	63.48	0.384
12:23	1.2	6.94	63.45	0.418
12:27	2.4	6.96	63.49	0.447
12:30	3.6	6.99	63.51	0.459

MONITORING WELL MW-3 GROUNDWATER FIELD PARAMETERS

Time	Total Vol. Removed/ gal	pН	Temp./ F	Cond./ ms(cm) ⁻¹
12:46 pm	0	7.01	63.64	0.566
12:51	1.4	7.04	64.29	0.552
12:54	2.8	7.04	64.13	0.573
12:58	4.2	7.03	63.64	0.533

ANALYTICAL RESULTS

Sampling locations: MW-1, 2, and 3

Analyses performed: TPHg, BTXE, MTBE, DIPE, TAME, ETBE, and TBA

Laboratories Used: Basic Labs, Redding, California (CA ELAP Cert #1677)

The analytical results for the current monitoring event are presented on the following page and are graphically depicted in Figure 5. The laboratory report is included as Appendix A. The historical analytical results for all monitoring wells, since the implementation of groundwater monitoring are included as Table 4.

	<u>MW-1</u> (ppb)	MW-2 (ppb)	MW-3 (ppb)
TPHg:	162	2,100	5,720
Benzene:	ND < 1.2	19.3	ND < 50.0
Toluene:	ND < 1.2	ND < 5.0	ND < 50.0
Xylenes:	ND < 2.5	ND < 10.0	ND < 100
Ethylbenzene:	ND < 1.2	ND < 5.0	ND < 50.0
MTBE:	250	3,960	7,790
DIPE:	ND < 1.2	ND < 5.0	ND < 50.0
TAME:	1.2	34.8	63.0
ETBE:	ND < 1.2	ND < 5.0	ND < 50.0
TBA:	ND < 125	ND < 500	ND < 5,000

ND = non-detectable

COMMENTS AND RECOMMENDATIONS

On October 27, 2005 the 14th Groundwater Monitoring Event for the three onsite monitoring wells was conducted at the BO&T Old Office at 211 Railroad Avenue in Blue Lake, California. A summary of the results are presented below.

• The depth to groundwater in the three onsite wells ranged from 5.56 feet bgs (MW-3) to 6.66 feet bgs (MW-2). Groundwater flow was towards the east at a gradient of 0.006 feet per foot.

• Groundwater samples from the three onsite monitoring wells were collected and analyzed for TPHg, BTXE, MTBE, DIPE, TAME, ETBE, and TBA. Laboratory results reported TPHg in all three wells at concentrations ranging between 162 ppb (MW-1) and 5,720 ppb (MW-3). The BTXE components were reported in well MW-2. Benzene was reported at a concentration of 19.3 ppb (MW-2). MTBE was reported in all wells at concentrations that ranged between 250 ppb (MW-1) and 7,790 ppb (MW-3). TAME was reported in all wells at concentrations that ranged between 1.2 ppb (MW-1) and 63.0 ppb (MW-3). No other constituents were detected in any wells at or above laboratory detection limits.

Based upon these results the following observations and conclusions have been made.

• Since the inception of the monitoring, groundwater flow directions have fluctuated from the north to the south towards the west. Groundwater flow was towards the north during the month of October in 2002 and 2003. The eastern flow direction that was calculated during the past two events is unique for this site.

TPHg has been detected in well MW-1 in nine out of fifteen sampling events since the inception of the monitoring, at varying concentrations. Laboratory results have detected TPHg in wells MW-2 and MW-3 in all but two sampling events since the inception of the monitoring program, with varying concentrations. See Figures 6-8.

• BTXE compounds have never been detected in well MW-1. Benzene has been consistently reported in well MW-2. Xylenes and ethylbenzene were consistently reported in MW-2 during the three initial sampling events, but have been inconsistent since the first quarter 2003. Toluene, xylenes, and ethylbenzene were detected in MW-3 during the second quarter 2004 and 2005 at significant concentrations.

- MTBE has been reported in every well during every sampling event thus far, with the highest concentrations reported in well MW-3. MTBE was reported at the highest concentration thus far in MW-1 during the third quarter 2005. Concentrations have fluctuated in wells MW-1 and MW-2, whereas in well MW-3, concentrations have generally decreased. See Figures 6-8.
- DIPE has not been reported in any well since the inception of the monitoring program.
- TAME has been reported at various times in monitoring well MW-1 at low concentrations. In well MW-2, TAME has been reported in nine out of fifteen monitoring events with a general decrease in concentration over time. TAME has been reported at the highest concentrations in well MW-3, where the levels have fluctuated with time.
- ETBE was reported twice in well MW-3 since the inception of the monitoring during the first quarter of 2003 (6.2 ppb) and 2005 (6.6 ppb).
- TBA was reported once in well MW-1 during the third quarter 2003 (54 ppb). TBA has not been reported in well MW-2 thus far. TBA was reported twice in well MW-3 since the inception of the monitoring during the first quarter of 2003 (1,000 ppb) and 2005 (152 ppb).

Based on the results of the October 2005 monitoring event and historical results, the following future activities are proposed.

Quarterly groundwater sampling will be continued until further notice. Quarterly
groundwater level measurements will be collected from the three onsite monitoring wells
to determine groundwater flow direction and gradient. Collected groundwater samples
will be analyzed for TPHg, BTXE, and MTBE.

• A Work Plan, dated November 30, 2005, to delineate the vertical and horizontal extent of MTBE in the groundwater, was prepared by SounPacific, and approved by HCDEH on January 10, 2006. In HCDEH response to the Work Plan, they also requested that following the investigation, a Corrective Action Plan (CAP) be prepared to address the contamination at the site. The implementation of the Work Plan is expected to be implemented during the first quarter of 2006.

CERTIFICATION

This report was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely upon field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific performs all its work in a manner that is currently used by members in similar professions working in the same geographic area. SounPacific will do what ever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions and other factors beyond what SounPacific could reasonably determine.

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ATTACHMENTS

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Table 2: Groundwater Analytical Results

Table 3: Water Levels

Table 4: Groundwater Analytical Results from Monitoring Wells

Chart 1: Hydrograph

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Figure 2: Site Plan

Figure 3: Sample Location Map

Figure 4: Groundwater Gradient Map October 2005

Figure 5: Groundwater Analytical Results

Figure 6: MW-1 Hydrocarbon Concentrations vs. Time

Figure 7: MW-2 Hydrocarbon Concentrations vs. Time

Figure 8: MW-3 Hydrocarbon Concentrations vs. Time

APPENDICES

Appendix A: Laboratory Report and Chain-of-Custody Form

Appendix B: Standard Operating Procedures

Appendix C: Field Notes

Tables & Chart

Table 1 Soil Analytical Results

Big Oil and Tire Old Office 211 Railroad Avenue Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TPHd (ppm)	TPHmo (ppm)	Total Pb (ppm)
SW-1	SW-1	3/6/1998	24	0.53	ND < 0.16	0.085	0.33	1.4	1.1	ND < 10	9.3
SW-2	SW-2	3/6/1998	9.3	0.067	0.26	0.92	0.17	ND < 0.10	24	ND < 10	9
SW-3	SW-3	3/6/1998	110	1.8	1.3	5.71	2.2	2.9	6.6	60	43
SW-4	SW-4	3/6/1998	120	2.6	1.1	11.2	2.1	5.1	7.9	52	7
PI-1	PI-1	3/6/1998	2.3	0.027	0.18	0.192	0.037	0.056	ND < 1.0	ND < 10	7.7
PI-2	PI-2	3/6/1998	1.7	0.097	0.12	0.102	0.02	0.15	ND < 1.0	11	10
B-1 @5'	B-1	10/24/2000	ND < 1.0	0.0056	ND < 0.010	ND < 0.005	ND < 0.005	0.062	ND < 1.0	ND < 10	9.3
B-1 @10'	B-1	10/24/2000	ND < 1.0	0.0057	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.8
B-1 @15'	B-1	10/24/2000	ND < 1.0	0.0069	ND < 0.005	ND < 0.005	ND < 0.005	0.16	ND < 1.0	ND < 10	9.7
B-2 @5'	B-2	10/24/2000	ND < 1.0	0.0059	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.1
B-2 @10'	B-2	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.11	ND < 1.0	ND < 10	10
B-2 @15'	B-2	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.3
B-3 @5'	B-3	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.030	ND < 0.005	ND < 0.005	0.055	ND < 1.0	ND < 10	8.4
B-3 @10'	B-3	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	7.1
B-4 @5'	B-4	10/24/2000	8.2	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	0.75	ND < 1.0	ND < 10	8.9
B-4 @10'	B-4	10/24/2000	1.1	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.83	ND < 1.0	ND < 10	8.7
B-4 @15'	B-4	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	6.7
B-5 @5'	B-5	10/24/2000	120	0.076	ND < 0.50	1.74	0.42	0.58	240	39	11
B-5 @10'	B-5	10/24/2000	3.3	5.0	0.41	0.584	0.64	1.6	ND < 1.0	19	12
B-6 @5'	B-6	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	0.19	ND < 1.0	ND < 10	8.9
B-6 @10'	B-6	10/24/2000	1.8	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.85	ND < 1.0	ND < 10	9.4
B-7 @5'	B-7	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.1
B-7 @10'	B-7	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	6.9
B-8 @5'	B-8	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	16
B-8 @8'	B-8	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	13
B-9 @5'	B-9	10/24/2000	ND < 1.0	0.010	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.4
B-9 @10'	B-9	10/24/2000	ND < 1.0	0.0076	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	9.0
B-10 @5'	B-10	10/24/2000	ND < 1.0	ND < 0.005	ND < 0.020	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	8.9
B-10 @10'	B-10	10/24/2000	ND < 1.0	0.0056	ND < 0.010	ND < 0.005	ND < 0.005	1.2	ND < 1.0	ND < 10	7.8

Table 1 (cont.) Soil Analytical Results

Big Oil and Tire Old Office 211 Railroad Avenue Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TPHd (ppm)	TPHmo (ppm)	Total Pb (ppm)
SB-11 @ 4'	B-11	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	39.0	
SB-11 @ 8'	B-11	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0066	ND < 10	ND < 10	
SB-11 @ 12'	B-11	5/15/2002	0.93	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0383	ND < 10	ND < 10	
SB-12 @ 4'	B-12	5/15/2002	0.195	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.071	ND < 10	ND < 10	
SB-12 @ 8'	B-12	5/15/2002	1.58	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.897	ND < 10	33.7	
SB-12 @ 12'	B-12	5/15/2002	2.67	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	1.02	17.6	197	
SB-13 @ 4'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-13 @ 8'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-13 @ 12'	B-13	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-14 @ 4'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-14 @ 8'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-14 @ 12'	B-14	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-15 @ 4'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-15 @ 8'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-15 @ 12'	B-15	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.005	ND < 10	ND < 10	
SB-16 @ 4'	B-16	5/15/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 10	ND < 10	
SB-16 @ 8'	B-16	5/15/2002	0.174	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.027	ND < 10	ND < 10	
SB-16 @ 12'	B-16	5/15/2002	0.794	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.313	ND < 10	ND < 10	

notes;
TPHg: Total petroleum hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl ether

TPHd: Total petroleum hydrocarbons as diesel

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol

ppm: parts per million = $\mu g/g = mg/kg = 1000 \ \mu g/kg$ TPHmo: Total petroleum hydrocarbons as motor oil

ND: Not detected at or below the method detection limit as shown.

Pb: lead

Table 1 (cont.) Soil Analytical Results Big Oil and Tire Old Office 211 Railroad Avenue Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)
SB-17 @ 4.5'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 8'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 12'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 14'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 16'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-17 @ 19'	B-17	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 4'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 8'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 10'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0085	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 12'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0426	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 16'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 17'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-18 @ 20'	B-18	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 4'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 8'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.032	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 10'	B-19	1/12/2005	0.337	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.476	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 12'	B-19	1/12/2005	0.475	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.864	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 18'	B-19	1/12/2005	0.0901	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.118	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 20'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 22'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-19 @ 24'	B-19	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 3'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 8'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	14	12
SB-20 @ 12'	B-20	1/12/2005	117	ND < 0.5	ND < 0.5	ND < 1.5	0.529	ND < 0.5	ND < 0.005	ND < 500	ND < 0.5	ND < 5.00	ND < 10	10
SB-20 @ 15'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.0595	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 20'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 21'	B-20	1/12/2005	0.230	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10
SB-20 @ 24'	B-20	1/12/2005	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 10	ND < 10

notes:
TPHg: Total petroleum hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether
DIPE: Dilsopropyl ether
TAME: Tertiary amyl methyl ether
ETEBE: Ethyl tertiary butyl ether
TBA: Tertiary butyl ether

TPHd: Total petroleum hydrocarbons as diesel TPHmo: Total petroleum hydrocarbons as motor oil Pr: lead ND: Not detected at or below the method detection limit as shown. ppm: parts per million = $\mu g/g = mg/kg = 1000 \ \mu g/kg$

Table 2

Groundwater Analytical Results
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	Methanol (ppb)	Ethanol (ppb)	Total Pb (ppb)
GW-1	GW-1	3/6/1998	180,000	19,000	16,000	15,700	3,400	65,000					230,000	48,000			130
B-1	B-1	10/25/2000	110	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	120					ND < 50	ND < 170			1,800
B-3	B-3	10/25/2000	390	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	630					ND < 50	ND < 170			130
B-5	B-5	10/25/2000	35,000	4,100	13	408.5	460	12,000					21,000	5,100			770
B-6	B-6	10/25/2000	13,000	ND < 0.50	ND < 1.0	ND < 0.50	ND < 0.50	13,000					ND < 50	ND < 170			410
B-7	B-7	10/25/2000	57	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	47					ND < 50	ND < 170			130
B-8	B-8	10/25/2000	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	15					ND < 50	ND < 170			2,900
B-9	B-9	10/25/2000	180	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	38					ND < 50	ND < 170			170
B-10	B-10	10/25/2000	12,000	ND < 0.50	ND < 2.0	ND < 0.50	ND < 0.50	20,000					ND < 50	ND < 170			110
GWSB-11 @ 12'	B-11	5/15/2002	3,710	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	2,840	ND < 0.5	11.8	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
GWSB-12 @ 12'	B-12	5/15/2002	25,800	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	28,865	ND < 0.5	94.9	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
GWSB-13 @ 12'	B-13	5/15/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	31.7	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
GWSB-14 @ 16'	B-14	5/16/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
GWSB-15 @ 12'	B-15	5/15/2002	245	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	127	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
GWSB-16 @ 12'	B-16	5/15/2002	3,740	53.2	1.2	6.5	18.2	3,860	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 50	ND < 50	ND < 5,000	ND < 5,000	
SBGW-17	B-17	1/12/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	684	201			
SBGW-18	B-18	1/12/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	13.7	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50			
SBGW-19	B-19	1/12/2005	614	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	902	ND < 0.5	10.0	ND < 5.0	ND < 50	ND < 50	ND < 50			
SBGW-20	B-20	1/12/2005	2,400	107	5.8	44.5	181	1,490	ND < 5.0	ND < 50	ND < 50	ND < 500	9,440	3,620			
SBGW-21	B-21	1/12/2005	97.0	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	139	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	118			
SBGW-22	B-22	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50			
SBGW-23	B-23	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50			
SBGW-24	B-24	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	7.2	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 50			
SBGW-25	B-25	1/11/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50	ND < 77	ND < 77			

notes:
TPHg: Total petroleum hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether
DIPE: Dilsopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol
TPHA: Total petroleum hydrocarbons as diesel
TPHm: Total petroleum hydrocarbons as motor oil
Pri: lead
ND: Not detected at or below the method detection limit as shown.
ppb: parts per billion = µg/1 = .001 mg/1 = 0.001 ppm.

Table 3

Water Levels
Big Oil and Tire Old Office
211 Railroad Avenue
Blue Lake, California 95525

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL	Thickness of Floating Product/ Feet
	5/19/2002	14.19	90.50	5.52	84.98	0.00
	6/16/2002	14.21	90.50	6.35	84.15	0.00
	7/16/2002	14.20	90.50	7.11	83.39	0.00
	8/17/2002	14.18	90.50	8.61	81.89	0.00
	9/11/2002	14.20	90.50	7.53	82.97	0.00
	########	14.20	90.50	7.87	82.63	0.00
	########	14.20	90.50	6.06	84.44	0.00
	########	14.41	90.50	2.52	87.98	0.00
	1/13/2003	14.22	90.50	2.11	88.39	0.00
	2/14/2003	14.18	90.50	3.43	87.07	0.00
MW-1	3/12/2003	14.18	90.50	4.08	86.42	0.00
	4/11/2003	14.18	90.50	2.23	88.27	0.00
	7/14/2003	14.39	90.50	6.52	83.98	0.00
	########	14.39	90.50	7.70	82.80	0.00
	1/17/2004	14.39	90.50	2.53	87.97	0.00
	4/22/2004	14.39	90.50	3.43	87.07	0.00
	7/23/2004	14.39	90.50	7.35	83.15	0.00
	1/21/2005	14.11 14.37	90.50	4.36	86.14 87.25	0.00
	1/21/2005 4/29/2005	14.37	90.50	3.25 4.05	86.45	0.00
	7/21/2005	14.40	90.50	5.75	84.75	0.00
	########	14.37	90.50	5.77	84.73	0.00
	5/19/2002	14.25	91.20	5.25	85.95	0.00
	6/16/2002	14.23	91.20	6.19	85.01	0.00
	7/16/2002	14.21	91.20	7.12	84.08	0.00
	8/17/2002	14.16	91.20	7.80	83.40	0.00
	9/11/2002	14.14	91.20	7.71	83.49	0.00
	########	14.13	91.20	8.28	82.92	0.00
	########	14.19	91.20	6.30	84.90	0.00
	########	14.43	91.20	3.73	87.47	0.00
	1/13/2003	14.14	91.20	2.25	88.95	0.00
	2/14/2003	14.21	91.20	3.25	87.95	0.00
MW-2	3/12/2003	14.15	91.20	3.67	87.53	0.00
141 44 -2	4/11/2003	14.15	91.20	2.20	89.00	0.00
	7/14/2003	14.30	91.20	6.61	84.59	0.00
ĺ	########	14.30	91.20	8.18	83.02	0.00
	1/17/2004	14.30	91.20	2.37	88.83	0.00
	4/22/2004	14.30	91.20	2.90	88.30	0.00
ĺ	7/23/2004	14.30	91.20	7.48	83.72	0.00
ĺ	1/21/2005	14.05	91.20	4.19	87.01	0.00
	1/21/2005	14.28	91.20 91.20	2.95	88.25	0.00
	4/29/2005	14.22		3.45	87.75	0.00
	7/21/2005	14.28	91.20	5.40	85.80	0.00
	########	14.24	91.20	6.66	84.54	0.00

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL	Thickness of Floating Product/ Feet
	5/19/2002	14.15	90.37	19.00	71.37	0.00
	6/16/2002	14.20	90.37	5.96	84.41	0.00
	7/16/2002	14.20	90.37	6.88	83.49	0.00
	8/17/2002	14.20	90.37	8.56	81.81	0.00
	9/11/2002	14.19	90.37	7.25	83.12	0.00
	10/15/2002	14.20	90.37	7.34	83.03	0.00
	11/15/2002	14.21	90.37	7.37	83.00	0.00
	12/16/2002	14.46	90.37	5.88	84.49	0.00
	1/13/2003	14.20	90.37	4.70	85.67	0.00
	2/14/2003	14.20	90.37	6.49	83.88	0.00
MW-3	3/12/2003	14.20	90.37	5.78	84.59	0.00
141 44 3	4/11/2003	14.20	90.37	4.55	85.82	0.00
	7/14/2003	14.40	90.37	7.22	83.15	0.00
	10/26/2003	14.40	90.37	7.26	83.11	0.00
	1/17/2004	14.40	90.37	5.11	85.26	0.00
	4/22/2004	14.40	90.37	4.58	85.79	0.00
	7/23/2004	14.40	90.37	7.23	83.14	0.00
	10/31/2004	14.14	90.37	5.79	84.58	0.00
	1/21/2005	14.41	90.37	4.41	85.96	0.00
	4/29/2005	14.42	90.37	5.10	85.27	0.00
	7/21/2005	14.43	90.37	5.94	84.43	0.00
	10/27/2005	14.42	90.37	5.56	84.81	0.00

Notes:

Bgs: Below Ground Surface MSL: Mean Sea Level

Table 4

Groundwater Analytical Results from Monitoring Wells Big Oil and Tire Old Office 211 Railroad Avenue

Blue Lake, California 95525

Sample	Sample	Annual	Sample	TPHg	Benzene	Toluene	Xylenes	Ethylbenzene	MTBE	DIPE	TAME	ETBE	TBA	Methanol	Ethanol	TPHd	TPHmo
Location	Event	Quarter	Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	Well Installation	Second Quarter	5/19/2002	364	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	344	ND < 0.5	ND < 0.5	ND < 0.5	ND < 40	ND < 5,000	ND < 5,000	170	ND < 50
	First Ouarterly	Third Ouarter	7/16/2002	144	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	234	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 5,000	ND < 5,000	235	ND < 50
	Second Quarterly	Fourth Quarter	10/152/02	99.3	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	225	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100			ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	130	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	ND < 50	ND < 5.0	ND < 5.0	ND < 10	ND < 5.0	150	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 130	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	370	ND < 0.5	0.5	ND < 0.5	54	ND < 5.0	ND < 13	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	ND < 50	ND < 5.0	ND < 5.0	ND < 10.0	ND < 5.0	190	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 200	ND < 50	ND < 500
MW-1	Seventh Quarterly	First Quarter	1/17/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	89	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 20	ND < 50	ND < 500
	Eighth Quarterly	Second Quarter	4/22/2004	160	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	260	ND < 0.5	0.8	ND < 0.5	ND < 5.0			ND < 50	ND < 500
	Ninth Quarterly	Third Ouarter	7/23/2004	ND < 500	ND < 5.0	ND < 5.0	ND < 15	ND < 5.0	370	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50			ND < 50	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	66	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	100	ND < 0.5	0.5	ND < 0.5	ND < 5.0			ND < 50	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005	79.1	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	91.3	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50			ND < 50	ND < 50
	Twelfth Quarterly	Second Quarter	4/29/2005	163	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	234								
	Thirteenth Quarterly	Third Quarter	7/21/2005	366	ND < 1.2	ND < 1.2	ND < 2.5	ND < 1.2	408	ND < 1.2	ND < 1.2	ND < 1.2	ND < 125				
	Fourteenth Quarterly	Fourth Quarter	10/27/2005	162	ND < 1.2	ND < 1.2	ND < 2.5	ND < 1.2	250	ND < 1.2	1.2	ND < 1.2	ND < 125				
	Well Installation	Second Quarter	5/19/2002	7,830	1,000	ND < 30	128	127	1,600	ND < 50	ND < 50	ND < 50	ND < 4,000	ND < 500,000	ND < 5,000	788	614
	First Quarterly	Third Quarter	7/16/2002	4,980	383	11.1	33.7	57.4	10,700	ND < 10	102	ND < 10	ND < 2000	ND < 5,000	ND < 5,000	322	ND < 50
	Second Quarterly	Fourth Quarter	10/152/02	3,370	127	3.2	1.7	5.5	15,000	ND < 0.5	86.2	ND < 0.5	ND < 100			ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	120	12	ND < 0.5	ND < 1.0	1.0	170	ND < 0.5	1.6	ND < 0.5	ND < 5.0	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	240	38	ND < 5.0	ND < 10	5.1	180	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 130	57	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	220	5	ND < 5.0	ND < 10	ND < 5.0	1,100	ND < 5.0	9	ND < 5.0	ND < 50	ND < 5.0	ND < 130	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	730	60	ND < 50	ND < 100	ND < 50	6,500	ND < 50	65	ND < 50	ND < 500	ND < 5.0	ND < 2,000	ND < 50	ND < 500
MW-2	Seventh Quarterly	First Quarter	1/17/2004	ND < 500	15	ND < 5.0	ND < 10	ND < 5.0	150	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 200	70	ND < 500
IVI VV -2	Eighth Quarterly	Second Quarter	4/22/2004	ND < 500	24	16	ND < 10	ND < 5.0	190	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50			ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	7/23/2004	1,600	9.3	ND < 5.0	ND < 15	ND < 5.0	4,000	ND < 5.0	29	ND < 5.0	ND < 50			75	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	550	11	ND < 5.0	ND < 15	ND < 5.0	660	ND < 5.0	5.6	ND < 5.0	ND < 50			67	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005	159	9.0	0.7	ND < 1.0	2.1	142	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50			ND < 50	ND < 50
	Twelfth Quarterly	Second Quarter	4/29/2005	173	18.8	ND < 1.2	ND < 2.5	5.4	170								
	Thirteenth Quarterly	Third Quarter	7/21/2005	1,410	8.9	ND < 5.0	ND < 10.0	ND < 5.0	1,650	ND < 5.0	16.0	ND < 5.0	ND < 500				
	Fourteenth Quarterly	Fourth Ouarter	10/27/2005	2,100	19.3	ND < 5.0	ND < 10.0	ND < 5.0	3,960	ND < 5.0	34.8	ND < 5.0	ND < 500				
	Well Installation	Second Quarter	5/19/2002	13,300	ND < 30	ND < 30	ND < 60	ND < 30	49,312	ND < 50	ND < 50	ND < 50	ND < 4,000	ND < 500,000	ND < 5,000	146	ND < 50
	First Quarterly	Third Quarter	7/16/2002	12,400	ND < 6.0	ND < 6.0	ND < 12.0	ND < 6.0	36,700	ND < 10	109	ND < 10	ND < 2000	ND < 5,000	ND < 5,000	200	ND < 50
	Second Quarterly	Fourth Quarter	10/152/02	5,690	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	25,800	ND < 0.5	104	ND < 0.5	ND < 100			ND < 50	ND < 50
	Third Quarterly	First Quarter	1/13/2002	1,800	ND < 0.5	ND < 0.5	ND < 0.9	ND < 0.5	11,000	р	71	6.2	1,000	ND < 5.0	ND < 12.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	4/11/2003	1,300	ND < 50	ND < 50	ND < 100	ND < 50	11,000	ND < 50	ND < 50	ND < 50	ND < 500	ND < 5.0	ND < 1,300	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	7/14/2003	2,000	ND < 50	ND < 50	ND < 100	ND < 50	19,000	ND < 50	71	ND < 50	ND < 500	ND < 5.0	ND < 1,300	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	10/26/2003	ND < 50	ND < 50	ND < 50	ND < 100	ND < 50	20,000	ND < 50	120	ND < 50	ND < 500	ND < 5.0	ND < 2,000	56	ND < 500
MW-3	Seventh Quarterly	First Quarter	1/17/2004	ND < 5,000	ND < 50	ND < 50	ND < 100	ND < 50	11,000	ND < 50	110	ND < 50	ND < 500	ND < 5.0	ND < 2,000	ND < 50	ND < 500
	Eighth Quarterly	Second Quarter	4/22/2004	10,000	ND < 50	100	ND < 100	ND < 50	14,000	ND < 50	130	ND < 50	ND < 500			ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	7/23/2004	7,300	ND < 50	ND < 50	ND < 150	ND < 50	13,000	ND < 50	92	ND < 50	ND < 500			120	ND < 500
	Tenth Quarterly	Fourth Quarter	10/31/2004	7,000	ND < 20	ND < 50	ND < 150	ND < 50	11,000	ND < 50	84	ND < 50	ND < 500			ND < 50	ND < 500
	Eleventh Quarterly	First Quarter	1/21/2005 4/29/2005	10,800	ND < 0.5 ND < 100	ND < 0.5	ND < 1.0	ND < 0.5	14,200	ND < 0.5	108	6.6	152			ND < 50	ND < 50
	Twelfth Quarterly Thirteenth Quarterly	Second Quarter Third Quarter	7/21/2005	19,200 9,050	ND < 100 ND < 62.5	284 ND < 62.5	898 ND < 125	136 ND < 62.5	12,700	ND < 62.5	ND < 62.5	ND < 62.5	ND < 6.250				
	Fourteenth Quarterly	Fourth Quarter	10/27/2005	5,720	ND < 62.5 ND < 50	ND < 62.5 ND < 50	ND < 123	ND < 62.5 ND < 50	7,790	ND < 62.5	63	ND < 62.5 ND < 50	ND < 6,230 ND < 5,000				
DW-1	Fifth Quarterly	Third Quarter	7/14/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	ND < 50	ND < 500
211-1	. an Quarterly	Tana Quarter	.,17/2003	.10 < 50	.10 < 0.3	110 < 0.0	.112 < 1.0	110 < 0.0	.10 < 0.3	110 < 0.5	110 < 0.5	110 < 0.5	110 < 5.0	110 < 5.0	110 < 13	.10 < 30	1.0 < 500

Notes:
TPHg: Total Petroleum Hydrocarbons as gasoline
MTBE: Methyl tertiary butyl ether

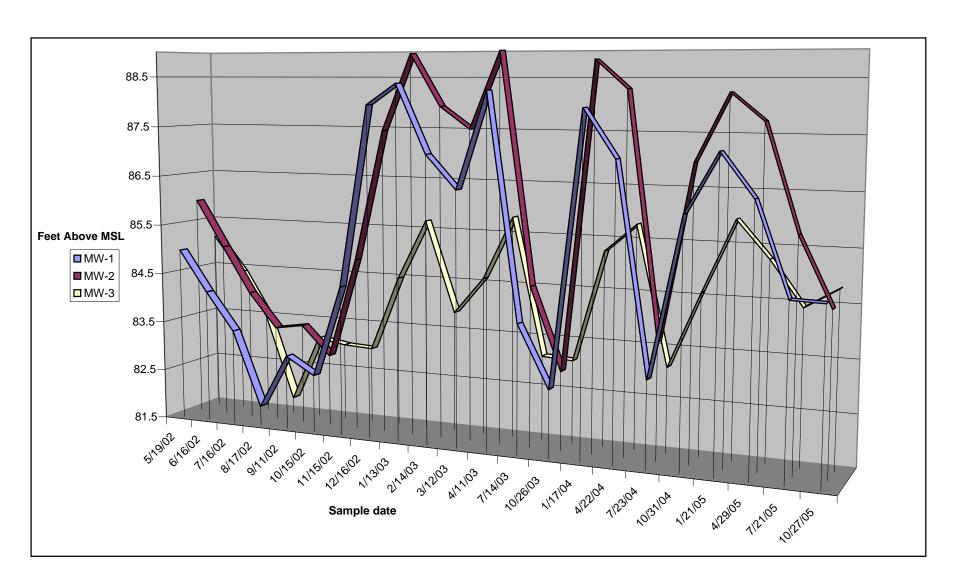
TPHd: Total Petroleum Hydrocarbons as diesel DIPE: Diisopropyl Ether TPHmo: Total petroleum hydrocarbons as motor oil TAME: Tertiary amyl methyl ether ETBE: Ethyl tertiary butyl ether

ND: Not detected. Sample was detected at or below the method detection limit as shown. ppb: parts per billion = μ g/1 = .001 mg/1 = 0.001 ppm

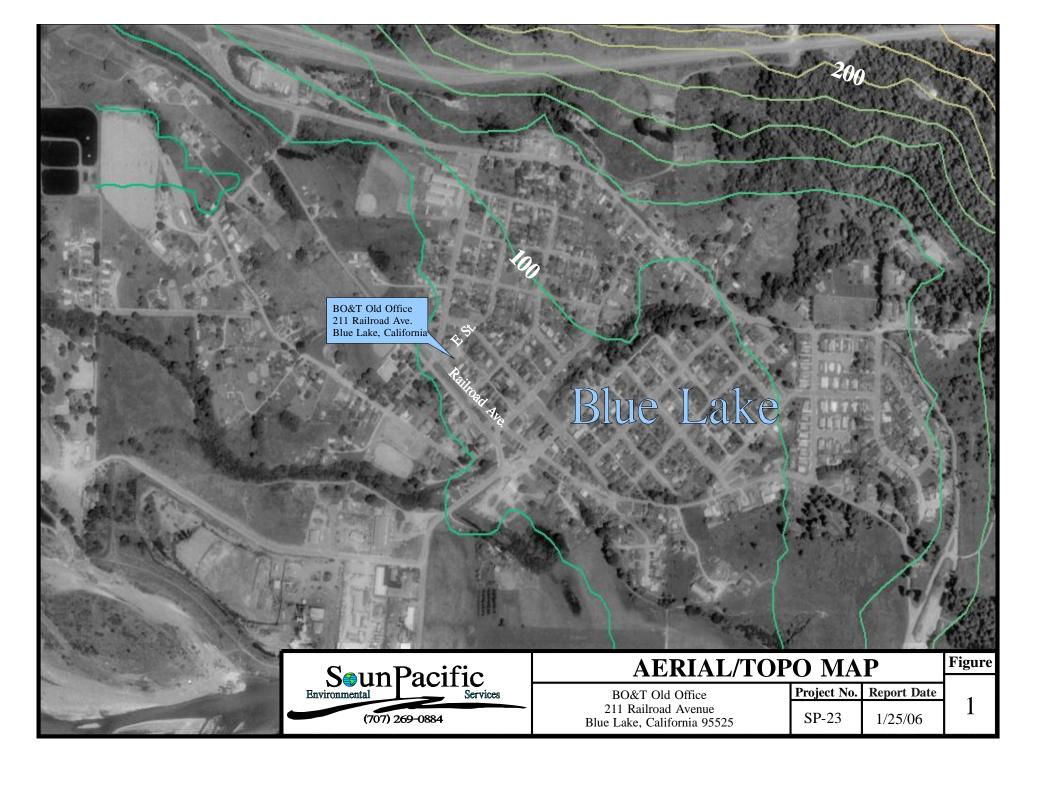
TBA: Tertiary butanol

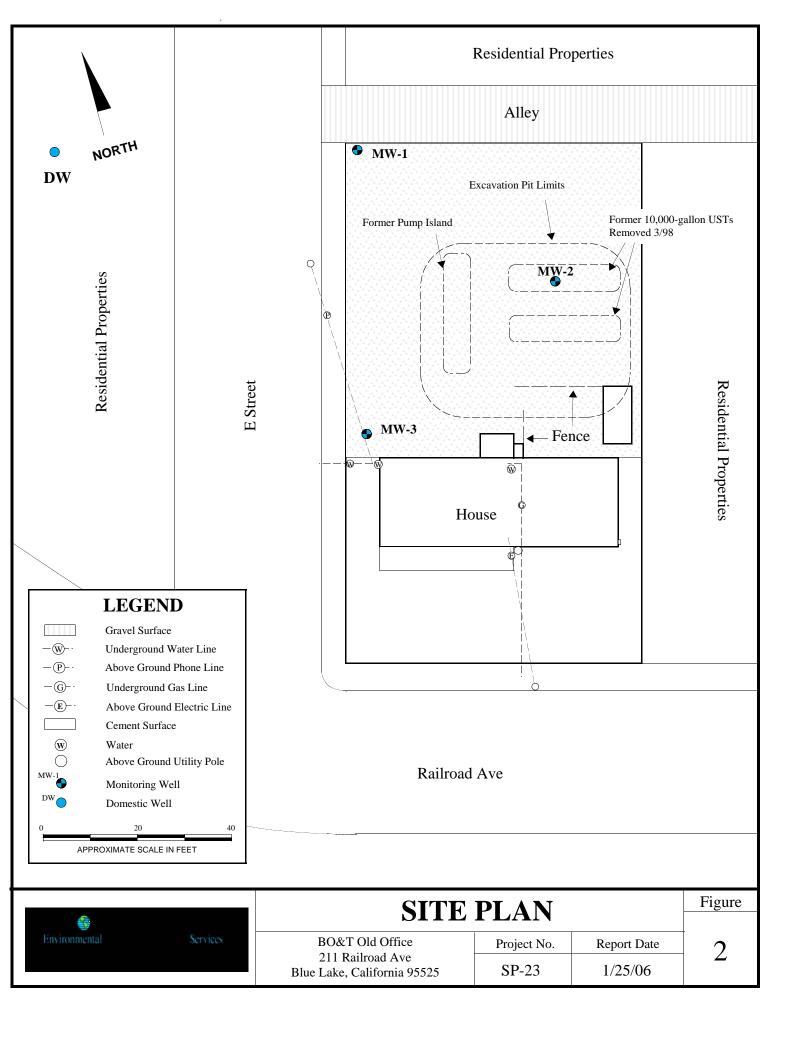
Chart 1
Hydrograph
Big Oil and Tire Old Office

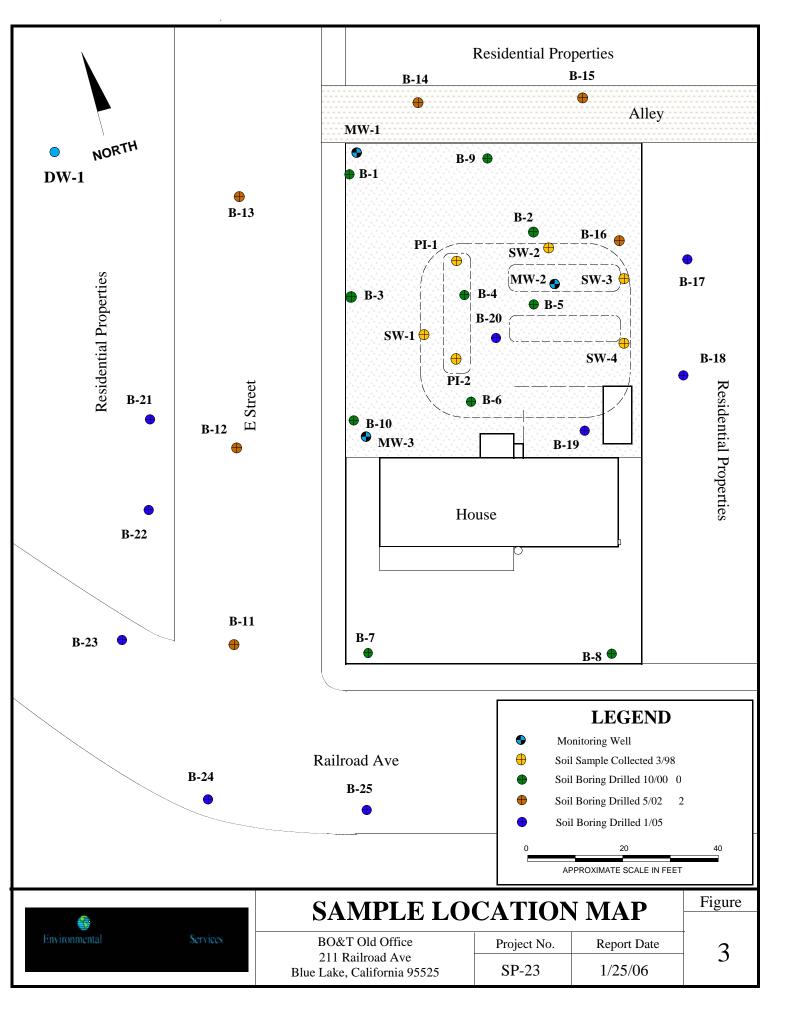
211 Railroad Avenue
Blue Lake, California 95525

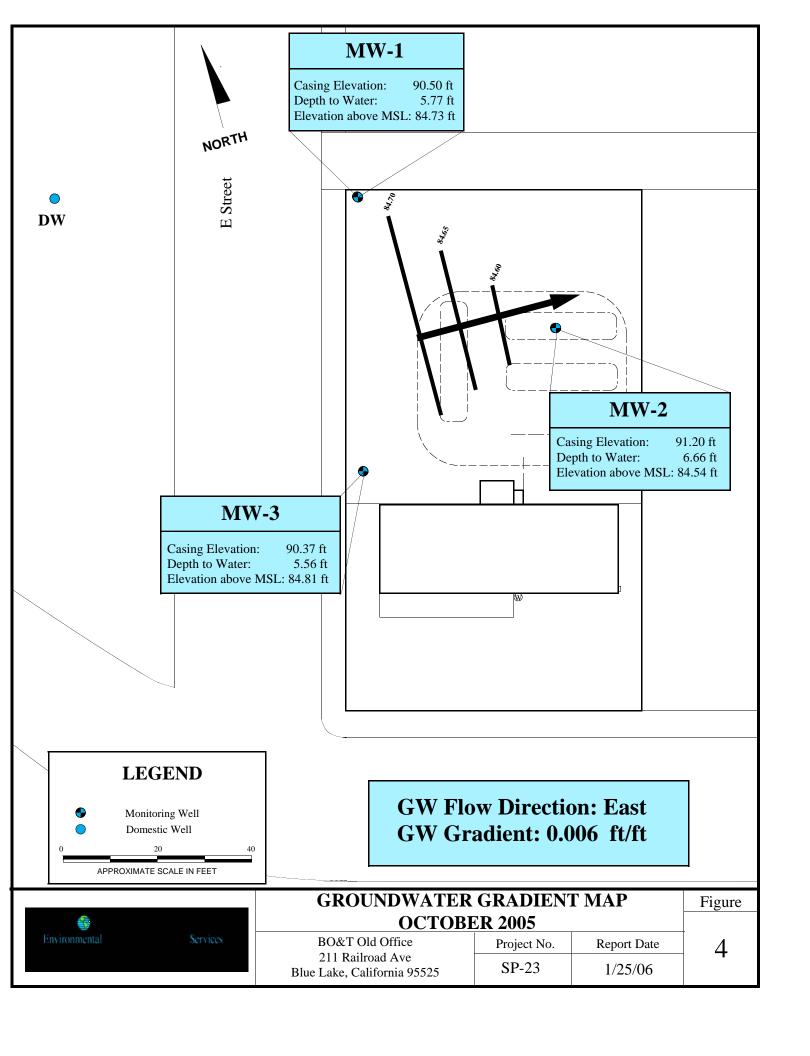


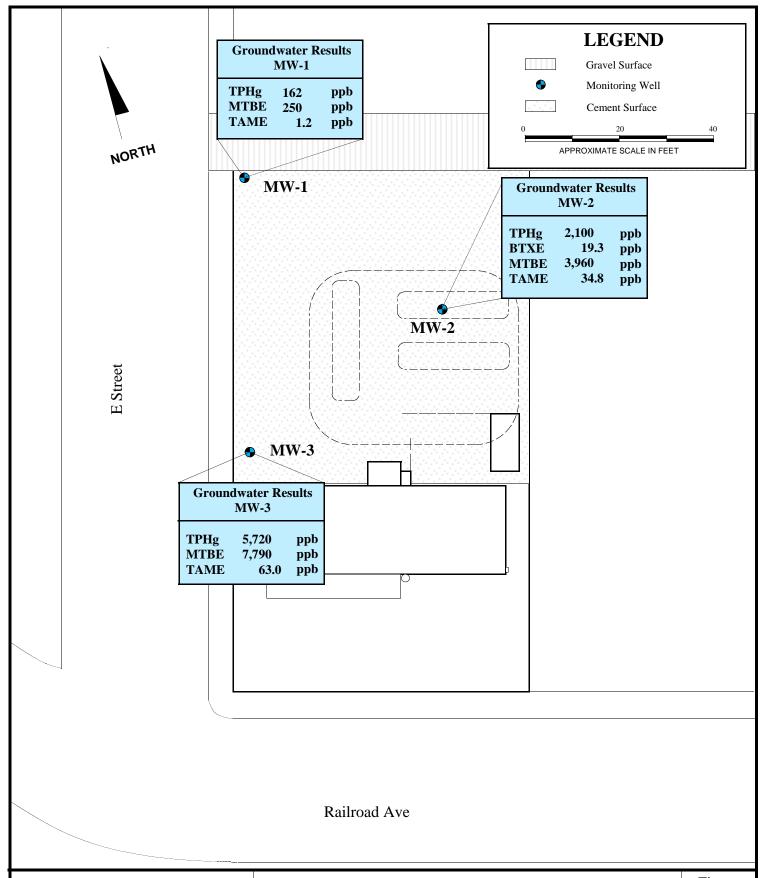
Figures





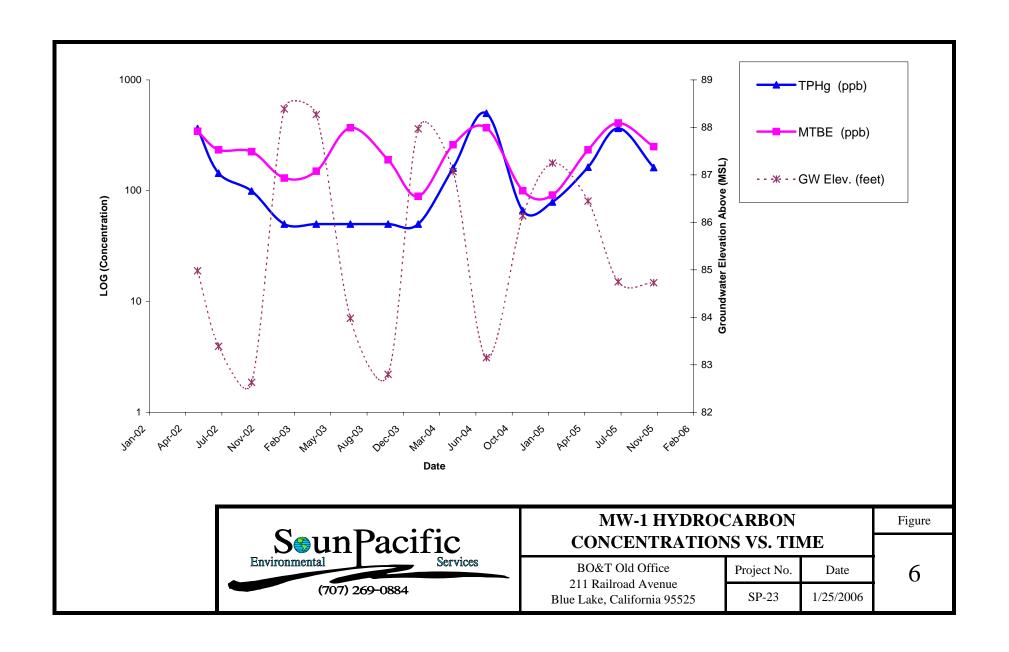


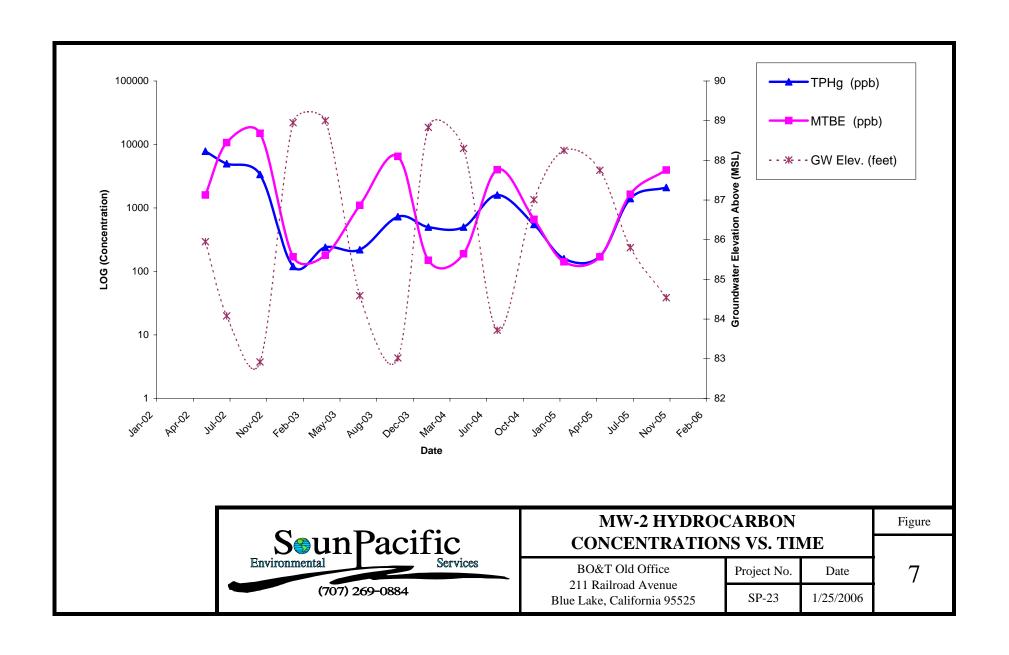


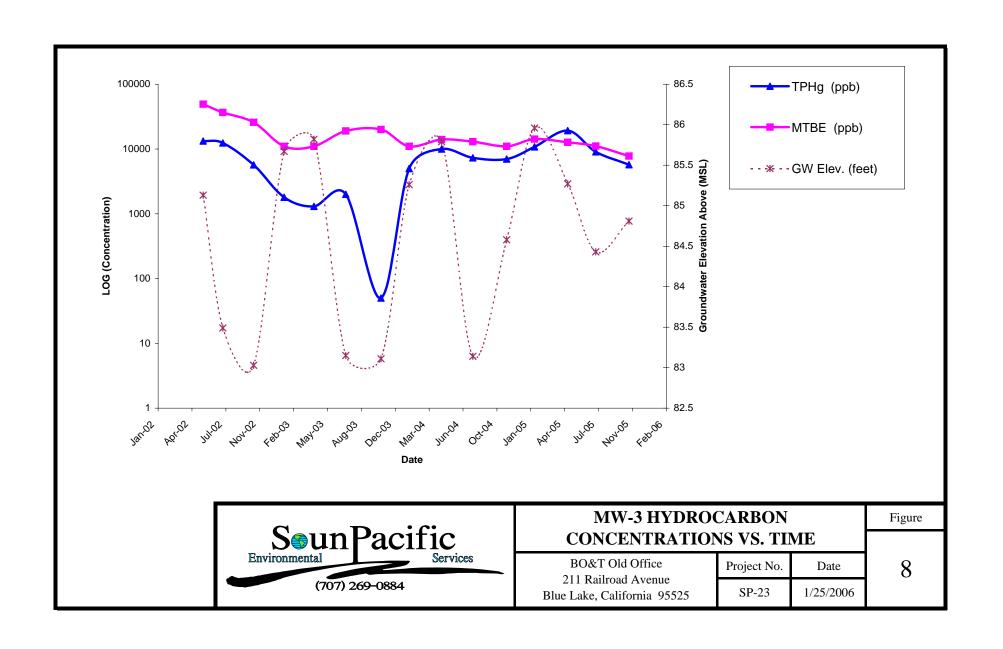




GROUNDWATER AN	AT VTICAT	DECIH TC	Figure
GROUNDWATER AND	ALTIICAL	RESULIS	
BO&T Old Office	Project No.	Report Date	5
211 Railroad Ave Blue Lake, California 95525	SP-23	1/25/06	3







Appendices

Appendix A



www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue fax 530.243.7494

Redding, California 96001

November 02, 2005

Lab ID: 5100909

Andy Malone SOUNPACIFIC 4612 GREENWOOD HEIGHTS DR KNEELAND, CA 95549

RE: BO&T OLD OFFICE SP-23

Dear Andy Malone,

Enclosed are the analysis results for Work Order number 5100909. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

Ricky D. Jensen Laboratory Director

California ELAP Certification Number 1677



www.basiclab.com

voice 530.243.7234 fax 530.243.7494

2218 Railroad Avenue Redding, California 96001

Report To:

SOUNPACIFIC

4612 GREENWOOD HEIGHTS DR

KNEELAND, CA 95549

Attention: Andy Malone

Project:

BO&T OLD OFFICE SP-23

Lab No:

5100909 Reported: 11/02/05

Phone: 707-269-0884

P.O. #

Volatile Organic Con	npounds
----------------------	---------

Analyte		Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
	.00909-01)	Sampled:10/	27/05 00:00	Received:10/3	1/05 10:18					· · · · · · · · · · · · · · · · · · ·
Gasoline		ug/l	162	R-07		125	EPA 8015/8260	11/01/05	11/01/05	B5K0033
Benzene		"	ND	R-07		1.2	u	"	0	н
Toluene		11	ND	R-07		1.2	If	n	n	n
Ethylbenzene		11	ND	R-07		1.2	11	"	11	It
Xylenes (total)		"	ND	R-07		2.5	II .	II .	If	u
Methyl tert-butyl ether	•	11	250	R-07		10.0	и	11/01/05	н	n
Di-isopropyl ether		II .	ND	R-07		1.2	11	11/01/05	u u	11
Tert-amyl methyl ether	r	II .	1.2	R-07		1.2	II .	"	u	u
Ethyl tert-butyl ether		11	ND	R-07		1.2	п	11	TI .	
Tert-butyl alcohol		11	ND	R-07		125	O	er er	n n	
Surrogate: 4-Bromofluorog	benzene		<i>87.2 %</i>		43-155	5	"	"	"	"
	00909-02)	Sampled:10/	27/05 00:00	Received:10/3	1/05 10:18					
Gasoline		ug/l	2100	R-07		500	EPA 8015/8260	11/01/05	11/01/05	B5K0033
Benzene		If	19.3	R-07		5.0	и ′	n'	н	11
Toluene		н	ND	R-07		5.0	TI TI	U	U	"
Ethylbenzene		11	ND	R-07		5.0	n n	0	n	ti
Xylenes (total)		II	ND	R-07		10.0	H	и	n n	U
Methyl tert-butyl ether		11	3960	R-07		100	н	11/01/05	н	H
Di-isopropyl ether		II .	ND	R-07		5.0	II .	11/01/05	11	*1
Tert-amyl methyl ether	•	п	34.8	R-07		5.0	17	11	lt .	0
Ethyl tert-butyl ether		u	ND	R-07		5.0	п	u	11	IT
Tert-butyl alcohol		D	ND	R-07		500	n	O	tr	*1
Surrogate: 4-Bromofluorob	benzene		90.4 %		<i>43-155</i>	,	u	"	"	"
MW-3 Water (510	00909-03)	Sampled:10/2	27/05 00:00	Received:10/3:	1/05 10:18				············	
Gasoline		ug/l	5720	R-07		5000	EPA 8015/8260	11/01/05	11/01/05	B5K0033
Benzene		rı	ND	R-07		50.0	If	H	,,	"
Toluene		"	ND	R-07		50.0	11	n	11	н
Ethylbenzene		п	ND	R-07		50.0	U	0	tt	n
Xylenes (total)		u	ND	R-07		100	II .	II .	п	
Methyl tert-butyl ether		n .	7790	R-07		1000	и	11/01/05	11	11
Di-isopropyl ether		n	ND	R-07		50.0	ш	11/01/05	ur .	17
Tert-amyl methyl ether		u	63.0	R-07		50.0	11		н	и
Ethyl tert-butyl ether		H	ND	R-07		50.0	" н	11	n	11
Tert-butyl alcohol		n	ND	R-07		5000	11	n n	n	11
Surrogate: 4-Bromofluorob	penzene		89.6 %		43-155		"	"	"	"

Basic Laboratory, Inc.

California D.O.H.S. Cert #1677



www.basiclab.com

voice 530.243.7234

2218 Railroad Avenue

fax 530.243.7494

Redding, California 96001

Report To:

SOUNPACIFIC

KNEELAND, CA 95549

4612 GREENWOOD HEIGHTS DR

Lab No:

Reported: 11/02/05 Phone: 707-269-0884

5100909

P.O. #

Attention:

Andy Malone

Project: BO&T OLD OFFICE SP-23

Notes and Definitions

R-07 The sample was diluted due to the presence of high levels of target analytes resulting in elevated reporting limits.

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag. J

Analyte DETECTED DET

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference < Less than reporting limit

Less than or equal to reporting limit ≤

> Greater than reporting limit

> Greater than or equal to reporting limit

MDL Method Detection Limit

RL/ML Minimum Level of Quantitation

MCL/AL Maxium Contaminant Level/Action Level

mg/kg Results reported as wet weight TTLC Total Threshold Limit Concentration Soluble Threshold Limit Concentration STLC TCLP

Toxicity Characteristic Leachate Procedure

Basic Laboratory, Inc. California D.O.H.S. Cert #1677

	_					TORY CHAIN													LAB		
CLIENT NAM		218	Rail	roa	d Ave., Reddir	ng, CA 96001 (5	30) 24					30) 2	43-74	494			- "		5	<u>/UO 90 9</u> PLE TYPE:	
Sounfacific								PROJECT NAME: PROJECT #: PROJECT #: PROJECT #: PROJECT #: SP-23 REQUESTED COMP. DATE: STATE FORMS?									Water # OF SAMPLES:				
P.O. Box 13							REQUESTED COMP. DATE: STATE FORMS?									?	# OF	SAMPLES:			
Sounfacific P.O. Box 13 Kneeland, CA 95549						TURN AROUND TIME: STD RUSH ANALYSIS REQUESTED											PAGE_L_OF				
PROJECT MA	PROJECT MANAGER:							#	<u>a</u>	19	وَ	1								REP:	
PHONE: 707-269	-0884		7e	x: 2 7 -	-269-0699	E-MAIL: and of O Souniacidic. (Box: & greg O Soun pacific.	,DIM	O F	240	260	2007		न्करश						ID#:		
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INSTRUCTION	VS, TERMS	AND	CO	NDIT	TIONS ON BACK																

Appendix B



Standard Operating Procedures

Groundwater Level Measurements and Free Phase Hydrocarbon Measurements

All SounPacific staff and contractors shall adopt the following procedures any time that groundwater elevations are determined for the purposes of establishing groundwater gradient and direction, and prior to any sampling event.

Wells are to be tested for free phase hydrocarbons (free product) before the first development or sampling of any new well, and in any well that has historically contained free product.

Equipment Checklist

ш	Combination water level / free phase hydrocarbon indicator probe (probe)
	Gauging Data / Purge Calculations Sheet
	Pencil or Pen/sharpie
	Disposable Gloves
	Distilled Water and or know water source on site that is clean
	Alconox (powder) or Liquinox (liquid) non-phosphate cleaners—do not use soap!
	Buckets or Tubs for decontamination station
	Tools necessary to access wells
	Site Safety Plan
	This Standard Operating Procedure
	Notify Job site business that you will be arriving to conduct work.

Procedure

- 1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
- 2. Access and open all monitoring wells to be measured. Allow wells to equilibrate for approximately 15 minutes before taking any measurements.

Standard Operating Procedure for Groundwater Level and Free Product Measurements Page 2 of 2

- 3. Decontaminate probe with Alconox or Liquinox solution, and rinse with distilled water.
- 4. Determine the diameter of the well to be measured and indicate this on the Gauging Data / Purge Calculations Sheet.
- 5. <u>Words of caution:</u> Please be careful with water level and product meters probes are not attached with high strength material so please make sure to avoid catching the end on anything in the well and make sure not to wind reel to the point that it could pull on the probe. *If product is suspect in a well, go to step 6, if no product is suspected go to step 7 below.*
- 6. When product is present or suspected: use the product level meter. Clip the static charge clamp to the side of the well casing. Then lower probe into the well through the product/water interface about one foot if possible. Then slowly raise the probe back up through the product/water interface layer and record the level as the tone changes from solid to broken-record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTP). Continue to raise the probe up through the product until the tone stops completely-record this level on the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW). Then go to step 8.
- 7. When <u>no</u> product is present or suspected: If no free product is present, record the depth of the water (to the nearest 0.01 foot) relative to the painted black mark on the top of the well casing. Leave the probe in the well just a hair above the water level to ensure the well as equilibrated. As the well rises, the tone will sound. Make sure no increase in water levels have occurred in over a ten-minute period. Water levels can lower as well as rise. Make sure you note when the level you keep lowering the probe to has remained stable for at least ten minutes. Once this has been accomplished, please record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW).
- 8. Turn off the probe, and use the probe to determine the depth to the bottom of the well relative to the top of the well casing. This is the depth to bottom measurement (DTB).
- 9. Decontaminate probe and tape by washing in an Alconox/Liquinox solution (*read directions on solution for ratio of water to cleanser*) and use the toothbrush provided to remove any foreign substance from the probe and tape. Then triple rinse probe and tape with clean water and then proceed to take measurements in the next well.
- 10. If sampling is to occur, proceed to implement SounPacific's Standard Operating Procedure for Monitoring Well Purging and Sampling. If no sampling is to be performed, close and secure all wells and caps.



Standard Operating Procedures

Monitoring Well Purging and Groundwater Sampling

All SounPacific employees and contractors shall adopt the following procedures any time that groundwater samples are to be taken from an existing groundwater monitoring well.

Prior to the implementation of these procedures, the groundwater level **MUST** be measured and the presence of free phase hydrocarbons determined in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Equipment Checklist

Gauging Data / Purge Calculations Sheet used for water level determination
Chain of Custody Form
pH/ Conductivity / Temperature meter
Pencil or Pen
Indelible Marker
Calculator
Disposable Gloves
Distilled Water
Alconox/liquinox liquid or powdered non-phosphate cleaner
Buckets or Tubs for decontamination station
Bottom-filling bailer or pumping device for purging
Disposable bottom-filling bailer and emptying device for sampling
String, twine or fishing line for bailers
Sample containers appropriate for intended analytical method (check with lab)
Sample labels
Site Safety Plan
Tools necessary to access wells
Drum space on site adequate for sampling event

SounPacific Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, Page 2 of 3

Procedure

- 1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
- 2. Measure groundwater levels and check for the presence of free product in accordance with the Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Purging

- 3. Calculate and record the volume of standing water in each well using the information provided on the Gauging Data / Purge Calculations sheet.

 (DTB-DTW) x Conversion Factor = Casing Volume.
- 4. The purge volume shall be at least three times and no more than seven times the volume of standing water (the casing volume).
- 5. Purge the well by bailing or pumping water from the well into a calibrated receptacle, such as a five gallon bucket or tub with markings to indicate one gallon increments. Collect purgeate in a 55 gallon labeled drum and store on site. Drum labels should include the date, contents, site number, and SounPacific's name and telephone number.
- 6. Take measurements of pH, conductivity, temperature, and visual observations to verify the stabilization of these parameters. At least five measurements of these parameters should be made throughout the purging process. The parameters shall be considered stabilized if successive measurements vary by less than 0.25 pH units, 10% of conductivity in μS, and 1°C (or 1.8°F). Continue purging until at least three times the casing volume has been removed, and the measured parameters have stabilized as indicated above. Do not exceed seven casing volumes.
- 7. Take a final depth to groundwater measurement and calculate the casing volume of the recharged well. Ideally, the casing volume should have recharged to at least 80% of the original measured casing volume before sampling commences. If due to slow recharge rates it is not feasible to wait for the well to fully recharge, then note this on the Gauging Data / Purge Calculation Sheet and proceed to sample following the procedure below.

SounPacific Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, Page 3 of 3

Sampling

- 8. After completing groundwater measurement, and checking for free product if necessary, in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, and after purging monitoring wells as described above, groundwater samples may be collected.
- 9. Slowly lower a clean, previously unused disposable bailer into the well water approximately half of the bailer length, and allow the bailer to slowly fill.
- 10. Withdraw the full bailer from the monitoring well and utilize the included (clean and unused) bottom-emptying device to fill the necessary sample containers, and seal the container with the included PTFE (Teflon) lined cap.
- 11. When filling VOAs, fill the VOA completely full, with the meniscus rising above the rim of the bottle. Carefully cap the VOA and invert it and gently tap it to determine whether air bubbles are trapped inside. If the VOA contains air bubbles, refill the VOA and repeat this step.
- 12. All samples shall be labeled with the Sample ID, the Sample Date, and the Sample Location or Project Number. Use an indelible marker for writing on sample labels.
- 13. Record all pertinent sample data on the Chain of Custody.
- 14. Place samples in an ice chest cooled to 4°C with ice or "blue ice". Bottles should be wrapped in bubble wrap, and VOA's should be inserted in a foam VOA holder to protect against breakage. Samples are to be kept at 4°C until delivered to the laboratory. Any transference of sample custody shall be indicated on the Chain of Custody with the appropriate signatures as necessary.
- 15. Utilize clean, previously unused gloves, bailer and line, and bottom-emptying device for each well sampled.
- 16. When finished with all sampling, close and secure all monitoring wells.
- 17. Leave the site cleaner than when you arrived and drive safely.

Appendix C

GAUGING DATA/PURGE CALCULATIONS

Job Site:	Bou	Tolo	Off	ice		Job No.:	SP-	23	Seun Pacific Services
Events	14 th	Sampliv	erly t	buinvi	J	Duter '	10-2	26-1	05 (707) 269-0884
WELL NO.	DIA. (in.)	DTB (ft.)	DYW (ft.)	ST (ft.)	CV (gal.)	P∀ (gal.)	SPL (ft.)	Bailer Loads	
Mw-1	2	14.37	5.77	8.6	1.4	4.2			Stabily Turbid.
MW-2	2	14.24	6.66	7.58	1.2	3.6			
MW-3	2	14.42	5.56	8-86	1.4	4.2			P.H.C Odor (faint), Stolety twolods Rel Codor, move clear
		-				-		-	
Explanation: DIA = Well Diame DTB = Depth to Bo	attom				2 in dia wel 4 in dia wel	Factors (cf): i cf = 0.16 gai./fi i cf = 0.65 gai./fi i cf = 1.44 gai./fi			
ST = Saturated Thi CV = Casing Volum PV = Purge Volum	ckness (DTB- ne (ST x cf) e (standard 3 : pmem 10 x C	x CV,			oun was wel	1.44 gal./II			Sampler: Tien-yu Tai



						Shoe	019							
Date	10-27	7-05	Project Nam	BONT OLL	Office	Project No: 57-23	Well Number: MW-1							
Analyse Tested	Analyses TP49, BTEX, 5-Oxys													
	Sample Containers: 3 Hil VOAs (40 ml)													
Purg Technique			Bailer		区	Pump								
Sounder Used: Water Meter Interface Meter														
Water & Free Product Levels														
,	Time Depth to Water Depth to Product Notes:													
1	54 am	6.7	4 fx	-		Nos								
11:	11	5.7	7			No S	heen							
11:	22	5.7	2			Sheer	h							
End														
				Field Mea	surements									
Time	Total Vol. Removed/(gal)	pH	Temp/(F)	Cond./(ms/cm)	DO/(mg/L)	D0/(%)								
11: Sagu	0	6.79	66.70	2415	2.56	27.8								
11:56	1.4	6.85	65.81	0.404	1.34	14.4								
12:00	2.8	6.88	65.13	0.428	1.05	11.2								
12:04	4.2	6.83	6490	0.419	1.00	10.7								
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				Field Scientist:	Tien	-yn Tai								
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Well Gauging/Sampling Report

							Sheet . / of					
Date: 10-27-05 Project Name: BOKT Old Office Project No: 4P-23 Well Number: MW-2												
Analyses TPHg, BTEX, 5-Dxys												
Sample Containers: 3 HU VOAS (40 MU)												
Purg Technique			Bailer		1 58	Pump						
Sounder Used: Water Meter Meter Meter												
Water & Free Product Leveis												
Time Depth to Weter Depth to Product Notes:												
10:5	T/ am	6.66				X/0 S	heen					
11:	07	6.66	,			No S	heey					
End												
				Field Mea	surements							
Time	Total Vol. Removed/(gal)	pH	Temp/(F)	Cond./(ms/cm)	DO/(mg/L)	DO/(%)						
12:19	0	6.93	63.48	0.384	0.86	9.0						
12:23	1.2	6.94	63.45	0.418	0.85	8.9						
12:27	2.4	696	63.49	0.447	0.83	8.7						
17:30	3,6	699	63.51	0.459	28.0	8.9						
						*						
			70		-							
				Field Scientist:	Tien	-yn Ta						
						/						



Well Gauging/Sampling Report

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						Sh	cet / of /						
Date: 10-27-05 Project Name: BORT Old Office Project No: SP-23 Well Number: MW-3													
Tested: TPHg, BTEX, 5-Dxys													
Containers: 3 HU VOAS (40 ml)													
Purge Technique			Beiler		13	Pump							
Sounder Used: Water Meter Meter Water Meter													
Water & Free Product Levels													
Time Depth to Water Depth to Freduct Notes:													
10:5	18 am	5.8	ft			No SV	len						
11:0	3	5.11				No Sh	een						
11:1	2	6.6)			No Sh	een						
1153	5	5.6	4		1000	No 81	neen						
12.20 5.57													
12.41 5.56													
				Field Mea	surements								
Time	Total Vol. Removed/(gal)	pН	Temp/(F)	Coed./(ms/cm)	DO/(mg/L)	DO/(%)							
12:460	0	201	63.64	0.566	1.27	133							
12:51	1.4	2.04	64.29	0,552	1.16	12.7							
12:54	2.8	204	64.13	0.573	0.87	9.1							
12:58	4.2	2.03	63.64	0.533	0.88	9.3							
							-						
							-						
						8							
1							*						
						*							
					Tion	1-yu Ta							
				Field Scientist:		1-yu /a							
						,	4						